

[54] ELECTRONIC MUSICAL INSTRUMENT

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[57] ABSTRACT

An electronic musical instrument, which is configured to simulate one or more instruments, provides a sound source, a display unit and a control portion. Herein, under control of the control portion, the display unit displays the predetermined graphic pattern corresponding to the tone-generation mechanism, i.e., tone-generation algorithm of an instrument to be simulated. The sound source contains a drive portion, a tone-generation portion and a resonance-radiation portion, each of which further contains a digital signal processor (DSP). All of these portions function to create a digitized musical tone signal corresponding to a simulated sound of the instrument by combining operation data outputted from the DSPs. By controlling the display unit, it is possible to arbitrarily vary the contents of the displayed tone-generation algorithm, so that the performer can easily and freely perform a music on this electronic musical instrument.

4 Claims, 17 Drawing Sheets

